

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method, comprising:
detecting by a network device a speed of the network device;
ascertaining by the network device one or more threshold values corresponding to one or more trigger events and the detected speed of the network device from a profile configured at the network device, wherein the profile includes a plurality of sets of threshold values, each of the plurality of sets of threshold values including one or more threshold values corresponding to one or more trigger events, wherein each of the plurality of sets of threshold values corresponds to a different set of one or more speeds of a plurality of speeds;
ascertaining by the network device one or more trigger values associated with the one or more trigger events; and
triggering roaming of the network device when one of the trigger values associated with one of the trigger events is equal to or exceeds one of the threshold values that correspond to the one of the trigger events and the detected speed of the network device;
wherein the threshold values include at least one of maximum data retry count, maximum number of beacons missed, or maximum data rate shift, wherein the threshold values do not include one or more speeds.
2. (Original) The method as recited in claim 1, wherein the network device is a Mobile Node implemented in a 802.11 environment.
3. (Original) The method as recited in claim 1, wherein the network device is a Mobile Node supporting Mobile IP.
4. (Original) The method as recited in claim 1, wherein roaming is triggered when the network device has reached or is nearing a perimeter of a coverage area of an Access Point to which the network device has associated or a Foreign Agent via which the network device has registered with its Home Agent.
5. (Original) The method as recited in claim 1, wherein roaming is triggered when the network device is no longer within a coverage area of an Access Point to which the network device has associated or a Foreign Agent via which the network device has registered with its Home Agent.

6. (Cancelled)
7. (Original) The method as recited in claim 1, wherein the rate at which the network device roams increases as the speed of the network device increases.
8. (Previously Presented) The method as recited in claim 1, wherein the one or more threshold values decrease as the speed of the network device increases.
9. (Currently Amended) The method as recited in claim 1, wherein the trigger events include at least one of maximum data retry count is exceeded, maximum number of beacons missed is exceeded, data rate shift.
10. (Currently Amended) A method, comprising:
detecting by a network device a speed of the network device;
ascertaining by the network device one or more threshold values corresponding to one or more trigger events and the detected speed of the network device from a profile configured at the network device, wherein the profile includes a plurality of sets of threshold values, each of the plurality of sets of threshold values including one or more threshold values corresponding to one or more trigger events, wherein each of the plurality of sets of threshold values corresponds to but does not include a different set of one or more speeds of a plurality of speeds, wherein the threshold values include minimum signal strength and wherein the trigger events include signal strength;
ascertaining by the network device one or more trigger values associated with the one or more trigger events such that a signal strength is ascertained; and
triggering roaming of the network device when the ascertained signal strength is less than the minimum signal strength threshold value, the minimum signal strength threshold value corresponding to the detected speed of the network device.
11. (Previously Presented) The method as recited in claim 1, wherein roaming is triggered when one of the trigger values associated with the maximum data retry count is exceeded trigger event is equal to or exceeds the maximum data retry count threshold value.
12. (Previously Presented) The method as recited in claim 1, wherein roaming is triggered when one of the trigger values associated with the maximum number of beacons missed is

exceeded trigger event is equal to or exceeds the maximum number of beacons missed threshold value.

13. (Previously Presented) The method as recited in claim 1, wherein roaming is triggered when one of the trigger values associated with the data rate shift trigger event is equal to or exceeds the maximum data rate shift threshold value.

14. (Cancelled)

15. (Original) The method as recited in claim 1, wherein detecting a speed of the network device is performed using a GPS.

16. (Original) The method as recited in claim 1, wherein the network device is a Mobile Node, the method further comprising:

registering with a Home Agent via a new Foreign Agent using a new Access Point when roaming is triggered, wherein the Mobile Node is within a coverage area of the new Foreign Agent and the new Access Point.

17. (Original) The method as recited in claim 16, further comprising:

de-registering with the Home Agent via a new Foreign Agent using a new Access Point, wherein the Mobile Node is no longer within a coverage area of the previous Foreign Agent.

18. (Original) The method as recited in claim 1, wherein the network device is a Mobile Node, and wherein when roaming is triggered, the Mobile Node is no longer within a coverage area of a Foreign Agent via which the mobile node has registered with its Home Agent.

19. (Original) The method as recited in claim 1, wherein when roaming is triggered, the network device is no longer within a coverage area of an Access Point servicing the network device.

20. (Cancelled)

21. (Previously Presented) The method as recited in claim 1, further comprising:
modifying one or more threshold values in one of the plurality of sets of threshold values.

22. (Previously Presented) The method as recited in claim 21, wherein modifying one or more threshold values comprises:

 multiplying the one or more threshold values by one or more multiplying factors, wherein each of the multiplying factors corresponds to the speed of the network device.

23. (Previously Presented) The method as recited in claim 22, wherein each of the multiplying factors decreases the one or more threshold values when the speed of the network device increases.

24. (Previously Presented) The method as recited in claim 22, wherein each of the multiplying factors increases the one or more threshold values when the speed of the network device decreases.

25. (Original) The method as recited in claim 22, further comprising:
 ascertaining the multiplying factors corresponding to the speed of the network device.

26. (Previously Presented) The method as recited in claim 22, wherein multiplying comprises:
 multiplying the one or more threshold values by a single multiplying factor.

27. (Previously Presented) The method as recited in claim 22, wherein multiplying comprises:
 multiplying each of the threshold values by a different multiplying factor, wherein the multiplying factor corresponds to the trigger event.

28. (Original) The method as recited in claim 1, wherein the network device is a Mobile Node, the method further comprising:
 registering with a Home Agent via a Foreign Agent when roaming is triggered, wherein the Mobile Node is within a coverage area of the Foreign Agent.

29. (Original) The method as recited in claim 28, further comprising:
 de-registering with the Home Agent via a new Foreign Agent, wherein the Mobile Node is no longer within a coverage area of the previous Foreign Agent.

30. (Original) The method as recited in claim 1, wherein the network device is a Mobile Node, and wherein when roaming is triggered, the Mobile Node is no longer within a coverage area of a Foreign Agent via which the mobile node has registered with its Home Agent.

31. (Cancelled)

32. (Currently Amended) A non-transitory computer-readable medium storing thereon computer-readable instructions, comprising:

instructions for detecting a speed of a network device;

instructions for ascertaining one or more threshold values corresponding to one or more trigger events and the detected speed of the network device from a profile configured at the network device, wherein the profile includes a plurality of sets of threshold values, each of the plurality of sets of threshold values including one or more threshold values corresponding to one or more trigger events, wherein each of the plurality of sets of threshold values corresponds to but does not include a different set of one or more speeds of a plurality of speeds;

instructions for ascertaining one or more trigger values associated with the one or more trigger events; and

instructions for triggering roaming when one of the trigger values associated with one of the trigger events is equal to or exceeds one of the threshold values that correspond to the one of the trigger events and the detected speed of the network device;

wherein the threshold values include at least one of maximum data retry count, maximum number of beacons missed, or maximum data rate shift.

33. (Currently Amended) An apparatus, comprising:

means for detecting a speed of the apparatus;

means for ascertaining one or more threshold values corresponding to one or more trigger events and the detected speed of the apparatus from a profile configured at the apparatus, wherein the profile includes a plurality of sets of threshold values, each of the plurality of sets of threshold values including one or more threshold values corresponding to one or more trigger events, wherein each of the plurality of sets of threshold values corresponds to a different set of one or more speeds of a plurality of speeds;

means for ascertaining one or more trigger values associated with the one or more trigger events; and

means for triggering roaming when one of the trigger values associated with one of the trigger events is equal to or exceeds one of the threshold values that correspond to the one of the trigger events and the detected speed of the apparatus;

wherein the threshold values include at least one of maximum data retry count, maximum number of beacons missed, or maximum data rate shift, wherein the threshold values do not include.

34. (Currently Amended) An apparatus, comprising:

a processor; and

a memory, at least one of the processor or the memory:

detecting a speed of the apparatus;

ascertaining one or more threshold values corresponding to one or more trigger events and the detected speed of the apparatus from a profile configured at the apparatus, wherein the profile includes a plurality of sets of threshold values, each of the plurality of sets of threshold values including one or more threshold values corresponding to one or more trigger events, wherein each of the plurality of sets of threshold values corresponds to but does not include a different set of one or more speeds of a plurality of speeds;

ascertaining one or more trigger values associated with the one or more trigger events; and

triggering roaming when one of the trigger values associated with one of the trigger events is equal to or exceeds one of the threshold values that correspond to the one of the trigger events and the detected speed of the apparatus;

wherein the threshold values include at least one of maximum data retry count, maximum number of beacons missed, or maximum data rate shift.

35. (Previously Presented) The method as recited in claim 1, wherein obtaining the one or more threshold values corresponding to one or more trigger events and the detected speed of the network device comprises:

identifying one of the plurality of sets of threshold values that corresponds to a set of one or more speeds that includes the detected speed of the network device.

36. (Previously Presented) The method as recited in claim 1, wherein each of the threshold values corresponds to a different one of the trigger events.

37. (Currently Amended) A network device, comprising:
a processor; and
a memory, at least one of the processor or the memory being adapted for:
detecting a speed of a network device;
obtaining one or more threshold values corresponding to the detected speed of the network device from a profile configured at the network device, wherein the profile includes a plurality of sets of threshold values, each of the plurality of sets of threshold values including one or more threshold values, wherein each of the plurality of sets of threshold values corresponds to a different set of one or more speeds of a plurality of speeds;
ascertaining one or more trigger values associated with one or more trigger events; and
triggering roaming when one of the trigger values associated with one of the trigger events is equal to or exceeds one of the threshold values that correspond to the one of the detected speeds of the network device;
wherein the threshold values include at least one of maximum data retry count, maximum number of beacons missed, or maximum data rate shift, wherein the threshold values do not include one or more speeds.
38. (Currently Amended) An apparatus, comprising:
a processor; and
a memory, at least one of the processor or the memory being adapted for:
detecting by a network device a speed of the network device;
ascertaining by the network device one or more threshold values corresponding to one or more trigger events and the detected speed of the network device from a profile configured at the network device, wherein the profile includes a plurality of sets of threshold values, each of the plurality of sets of threshold values including one or more threshold values corresponding to one or more trigger events, wherein each of the plurality of sets of threshold values corresponds to a different set of one or more speeds of a plurality of speeds, wherein the threshold values include minimum signal strength and wherein the trigger events include signal strength, and wherein the threshold values do not include one or more speeds;
ascertaining by the network device one or more trigger values associated with the one or more trigger events such that a signal strength is ascertained; and

triggering roaming of the network device when the ascertained signal strength is less than the minimum signal strength threshold value, the minimum signal strength threshold value corresponding to the detected speed of the network device.

39. (New) The method as recited in claim 1, wherein the threshold values include a maximum data retry count, maximum number of beacons missed, and maximum data rate shift.

40. (New) The method as recited in claim 1, wherein the threshold values consist of maximum data retry count, maximum number of beacons missed, and maximum data rate shift.

41. (New) The method as recited in claim 10, wherein the threshold values consist of minimum signal strength.

42. (New) The method as recited in claim 1, wherein the trigger events include maximum data retry count is exceeded, maximum number of beacons missed is exceeded, and data rate shift.

43. (New) The method as recited in claim 1, wherein the trigger events consist of maximum data retry count is exceeded, maximum number of beacons missed is exceeded, and data rate shift.

44. (New) The method as recited in claim 1, wherein each of the plurality of sets of threshold values corresponds to a different set of two or more speeds of a plurality of speeds.